

BIOL 3250 – Ecology and Evolution

Spring Semester 2011

Dr. Carter

BC 1105

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Please use the mail tool in BlazeVIEW.

Tues Lec Sect DE

9:30 – 10:45 AM, BC 1024

BC 1040 or BC 1105

Tues & Thurs, 11:00 AM – 12:00 Noon; Wed, 1:00 –  
2:00 PM; other times by appointment

## Required Text and Related Resources

- Required text  
Smith, R.L., and T.M. Smith. 2001. . 6th Ed. Benjamin Cummings, San Francisco, CA. 771 pp.  
Companion site for text – [http://occawlonline.pearsoned.com/bookbind/pubbooks/smith\\_efb/](http://occawlonline.pearsoned.com/bookbind/pubbooks/smith_efb/)
- The following web sites will be used for the unit on evolution:  
<http://evolution.berkeley.edu/evosite/evo101/index.shtml>  
<http://www.ucmp.berkeley.edu/clad/clad1.html>

## Miscellaneous Required Items

- Pencils or pens for recording notes, etc.
- Notebook

Attendance and Punctuality. Regular attendance and punctuality are expected. The student is responsible for all material missed, regardless of the reason for absence. Students arriving late for class should enter the lecture room or laboratory quietly and take the nearest seat to avoid disruption. Bear in mind that field trips require prompt departure from campus and that tardiness could easily result in a student missing transportation to the field site and absence from the field trip, and that such absences will adversely affect the course grade. Attendance will normally be taken at the beginning of the period. Students who arrive after the roll is taken are counted absent unless they inform their instructor immediately after class or lab of their tardiness. It is the student's responsibility to inform the instructor of her/his tardiness. Each three cases of tardiness will be counted as one absence, and cases of tardiness will be counted as absences thusly, unless a satisfactory explanation is provided to the instructor by the student. It is the instructor's prerogative to have the explanation in writing. Any scheduling problems or other extenuating circumstances necessitating chronic tardiness should be explained to the instructor in writing and properly documented at the beginning of the semester. In order to have an absence excused, the student must provide a written explanation with proper documentation immediately upon returning to class. Providing an explanation of absence or tardiness by the student does not insure that the absence or tardiness will be excused. The instructor shall determine the validity of all excuses. Students absent from more than 20% of the regularly scheduled lecture and laboratory periods are subject to failure in the course, as detailed under Absence Regulations in the VSU Undergraduate Catalog.

Requirements and Recommendations for Field Trips. Conditions in the field may be hazardous, they are highly variable, and they are beyond the control of your instructor. Therefore, it is imperative that individual students accept responsibility for taking precautions to protect themselves in the field. Field hazards include ticks, stinging and biting insects, poison ivy, poison oak, poison sumac, briars, and occasionally venomous snakes. Long pants and sturdy shoes or boots are essential for field work. Old clothes are recommended for field work, as are rain gear and warm clothing when appropriate. Insect repellent is also strongly recommended, and students should check themselves for ectoparasites (i.e. ticks) immediately upon returning from field trips, and shower as soon as possible. Students are also advised to bring along a bottle of water during field trips.

fully during field labs will adversely affect ones grade.

Obviously, failure to participate

Lecture Examinations. Three (3) equally weighted lecture examinations will be given during the semester, one of these prior to midterm

(2000) defines plagiarism as " the unauthorized use of the language and thoughts of another author and the representation of them as one's own." There are many forms of plagiarism. Perhaps the most blatant form is copying from some other source without citing that source. Other types of plagiarism include using a paper written by another and the improper

## Tentative Lecture Schedule with Reading Assignments

[assigned chapters in Smith & Smith, 2001; BV=cf. web links posted in BlazeVIEW]

Week of Jan 10

Introduction to Ecology [1]  
History, Patterns, & Mechanisms of Evolution  
[BV]

Week of Jan 17

Population Genetics & Mechanisms of  
Microevolution [19, BV]

Week of Jan 24

Species, Speciation, & Phylogeny [BV]

Week of Jan 31

"Evo-Devo" [BV]

Week of Feb 7

Macroevolution [BV]

Week of Feb 14

The Physical Environment [2, 3, 4]  
Adaptation [5, 6, 7, 8, 9]

Week of Feb 21

Ecosystem Productivity [24]  
Biogeochemical Cycles [25, 26]

Week of Feb 28

Population Ecology: Demography, Dynamics, &  
Density-dependence [10, 11, 12]

Week of Mar 7

Population Ecology (cont.) [10, 11, 12]

Week of Mar 14

Week of Mar 21

Reproductive Ecology & Life Histories [13]

Week of Mar 28

Interspecific Competition [14]  
Concepts of Predation [15]

Week of Apr 4

Predator-Prey Interactions [16]  
Co-evolution [17]

Week of Apr 11

Human Impacts on Populations [19]  
Community Structure [20]

Week of Apr 18

Community Dynamics/Succession [21, 22]

Tentative Lab Schedule with Assignments and Point Allocation

Week 1 Introduction	
Week 2 Introduction to Inland Coastal Plain Ecosystems (Note: read pp. 12-17; skim Ch. 28-31 + Appendix A for ideas)	Hypotheses (10 points)